

Make Data Count: Advancing meaningful evaluation of open data

Iratxe Puebla
Director, Make Data Count

11 December 2025



Data sharing has substantially advanced over the last few years



Making your research data open

UK Research and Innovation (UKRI) expects research data arising from its funding to be made as open as possible and as restricted as necessary. Good research data management practices should be followed throughout your project.

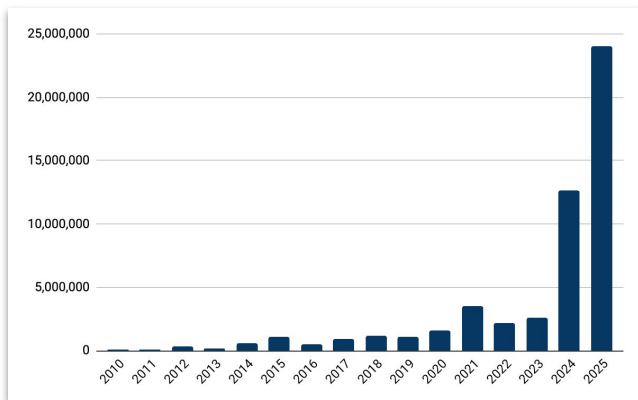
Good research data sharing and management means that publicly funded research is more:

- transparent and easily scrutinised, helping to increase public trust
- easy to re-use and build upon
- collaborative and efficient



Summary of open science practices in Horizon 2020 and Horizon Europe:

	In Horizon 2020	Recommended or mandatory in Horizon Europe
Open access to research data under the principle "as open as possible, as closed as necessary"	Partially: Only for projects which are part of open Research Data Pilot	Mandatory (but exploitation, protection of IPR, security and privacy rules have a higher priority)



To drive further progress, we need to look at what happens *after* data are shared: who is using data & for what purposes?

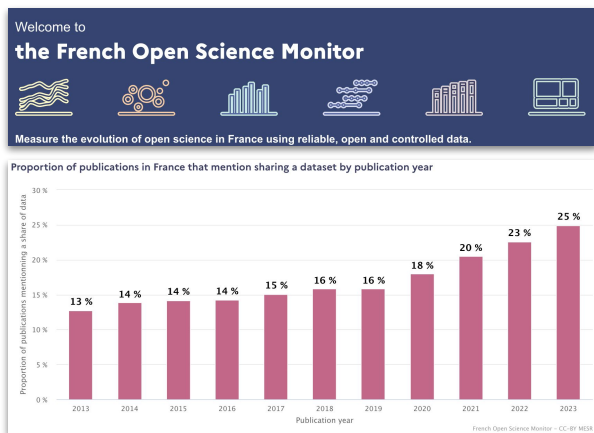
- Is open data leading to **research progress**, and if so how?
- Is research **reproducibility** increasing?
- Is there **equitable** participation?

54 million datasets registered with DataCite.
DataCite Commons (October 2025) commons.datacite.org

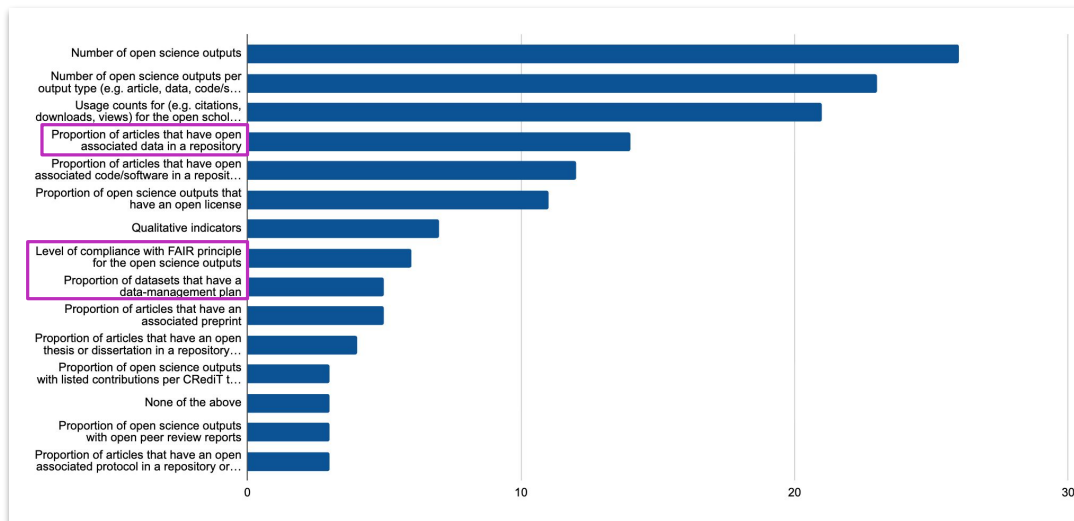
Interest in monitoring open science practices



The Open Science Monitoring Initiative (OSMI) promotes the development and adoption of practices for monitoring open science. Open data monitoring is key within this framework.



Open data monitoring by the French Monitor for open science,
frenchopensciencemonitor.esr.gouv.fr/



Open science indicators used by scholarly content providers, OSMI working group survey.

Full survey results at the blog:
upstream.forcell.org/monitoring-open-science-survey/



A community initiative that works to build the tools and practices necessary so that the community can meaningfully assess how data are used.

Our vision: an ecosystem where data are routinely evaluated and rewarded as primary outputs.



Open infrastructure to collect and share measures of data usage



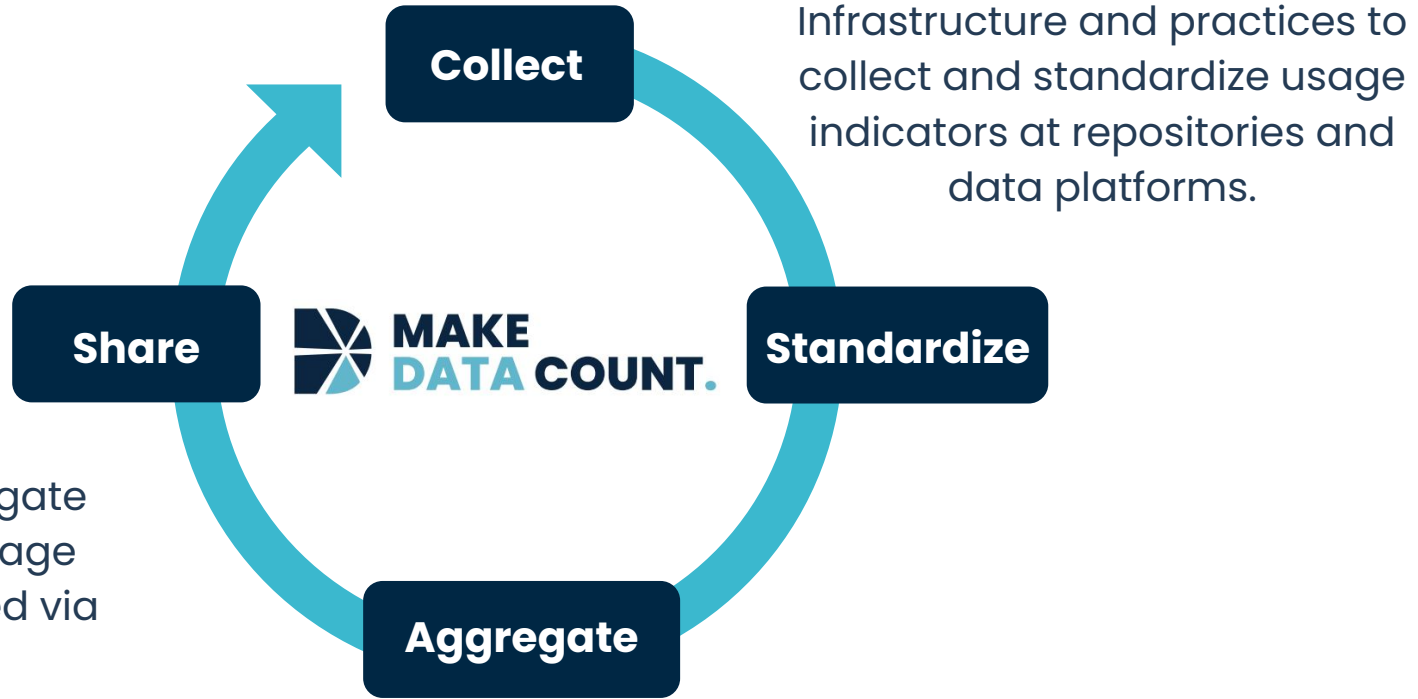
Standards & evidence to contextualize data metrics



Advocacy to promote recognition of data usage & impact in assessment

<https://makedatacount.org>

Collect, standardize and share data-usage indicators



Collect, standardize and share data views and downloads

Make Data Count has developed tools and recommendations to collect and share views and downloads for open datasets.

The screenshot shows the DRYAD dataset page. The title is "Phylogeny reveals non-random medicinal plant organs selection by local people in Benin". The authors listed are Gaoue, Orou G., Yessoufou, Kowiyou, Mangka, Ledile, Vodouhe, and Fifanou. The dataset was published on April 30, 2021. There are three data files: "Apr 30, 2021 version files" (751.07 KB), "Dataset S1.csv" (5.68 KB), and "Dataset S2.xlsx" (59.01 KB). The page also includes a citation section with 210 views, 25 downloads, and 2 citations, and a list of subject keywords.

<https://doi.org/10.5061/dryad.pk0p2ngnh>

Capture and display at repositories

The screenshot shows the DataCite Commons page for the dataset. The title is "Phylogeny reveals non-random medicinal plant organs selection by local people in Benin". The DOI is https://doi.org/10.5061/dryad.pk0p2ngnh. The page displays 1 citation, 233 views, and 25 downloads. There are buttons for "Download Metadata" and "Add to ORCID Record". The page also includes a description of the dataset and a list of creators.

commons.datacite.org/doi.org/10.5061/dryad.pk0p2ngnh

Visibility and aggregation via DataCite

Collect, standardize and share data views and downloads

The **Code of Practice for Research Data**, developed by Make Data Count and COUNTER, provides a standard to normalize usage indicators.

- **Transparency** on how indicators are collected and processed.
- **Comparison and interpretation** across different datasets and platforms.

Make Data Count recommendations are based on this standard, with implementation options for repositories.

makedatacount.org/explore-resources/resources-for-repositories-and-data-platforms/

01 Implement MDC recommendations



Two approaches to collect data views & downloads normalized per the COUNTER standard:

- Usage tracker widget that collects counts on dataset landing pages.
- Log processing server wide.



02 Share the data usage counts



- Display usage counts on dataset records to raise visibility & recognition for data creators.
- Submission of counts to DataCite enables aggregation & discoverability.



03 Review & gain insights



- Review usage counts for alignment with usage tracking standards or potential outliers.
- Gain insights into highly-used datasets and repository use over time.

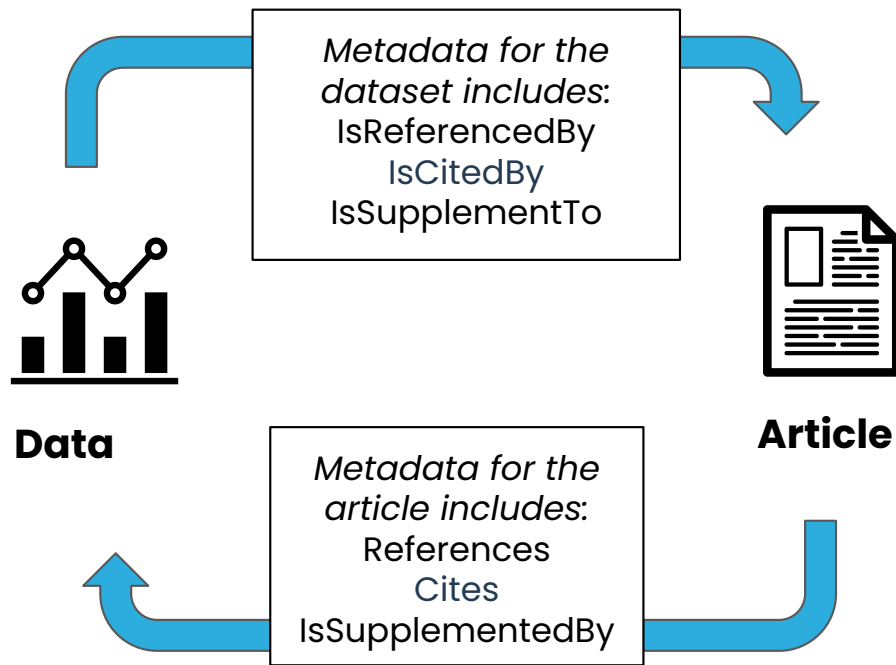
Collect, standardize and share data citations

DataCite infrastructure allows the collection, aggregation and sharing of data citations.

The **RelatedIdentifier** field in the DataCite metadata schema creates links between objects.

Sub-properties:

- relatedIdentifierType
- relationType



Collect, standardize and share data citations

DataCite infrastructure allows the collection, aggregation and sharing of data citations.

The screenshot shows the DataFirst Data Catalog interface. The main heading is "General Household Survey 2018 South Africa, 2018" with a "GET MICRODATA" button. Below this, there are fields for Reference ID (zaf-statssa-ghs-2018-v1), Producer(s) (Statistics South Africa), and Collections (South African Household Survey Data). Metadata links for PDF, DDI/XML, and JSON are provided. On the right, it shows creation and modification dates, page views (85220), and downloads (5390). The "Data Description" tab is active, showing a search bar and a table of data files.

The screenshot shows the DataCite Commons interface. The main heading is "General Household Survey 2018" with the DOI <https://doi.org/10.25828/9tmn-fz97>. A "2 Citations" badge is highlighted in pink. Below this, there are buttons for "Download Metadata" and "Add to ORCID Record". The "Cite as" section shows the citation: "Statistics South Africa. (2020). General Household Survey 2018 [Data set]. DataFirst. <https://doi.org/10.25828/9TMN-FZ97>". A dropdown menu is set to "APA" and a "Dataset" button is visible.

```
{
  "id": "02bd1abb-2aae-478d-872c-e758d44c325a",
  "type": "events",
  "attributes": {
    "subj-id": "https://doi.org/10.1016/j.childyouth.2022.106801",
    "obj-id": "https://doi.org/10.25828/9tmn-fz97",
    "source-id": "crossref",
    "relation-type-id": "references",
    "total": 1,
    "message-action": "add",
    "source-token": "36c35e23-8757-4a9d-aacf-345e9b7eb50d",
    "license": "https://creativecommons.org/publicdomain/zero/1.0/",
    "occurred-at": "2022-12-31T05:48:43.000Z",
    "timestamp": "2023-01-02T08:55:46.418Z"
  }
},
```

commons.datacite.org/doi.org/10.25828/9tmn-fz97

Completing the picture about the use and reach of open data



Foto por Valery Fedotov en Unsplash

Data citations

Existing processes do not yet provide the full picture on the use of data.

In the context of data citations:



Only a fraction of data citations are reported as structured references in articles or in dataset metadata.



The workflows need to be expanded to capture citations for different data identifiers.



A number of groups complete work to find data citations, but these citations are stored in different (and sometimes closed) locations.

Data Citation Corpus



A large open resource of data citations.

The Data Citation Corpus aggregates data citations identified by different methodologies, including persistent identifier metadata, curation and text mining.

- ✓ Multiple sources: DataCite Event Data, Chan Zuckerberg Initiative, Aligning Science Across Parkinson's (ASAP), Europe PMC
- ✓ Datasets with DOIs and accession numbers
- ✓ Transparency about provenance

The Data Citation Corpus currently aggregates 10 million data citations

The screenshot shows the Zenodo interface for the dataset 'Data Citation Corpus Data File'. The page includes a search bar, navigation links for 'Communities' and 'My dashboard', and user options for 'Log in' and 'Sign up'. The dataset is published on August 15, 2025, version v4.1. It has 7K views and 1K downloads. A table shows statistics for all versions and the current version. The data is provided in batches of approximately 1 million records each, with the publication date and batch number included in the file name. The data citations originate from the following sources: DataCite Event Data, Chan Zuckerberg Initiative (CZI) Science Knowledge Graph, Aligning Science Across Parkinson's (ASAP), and Europe PMC.

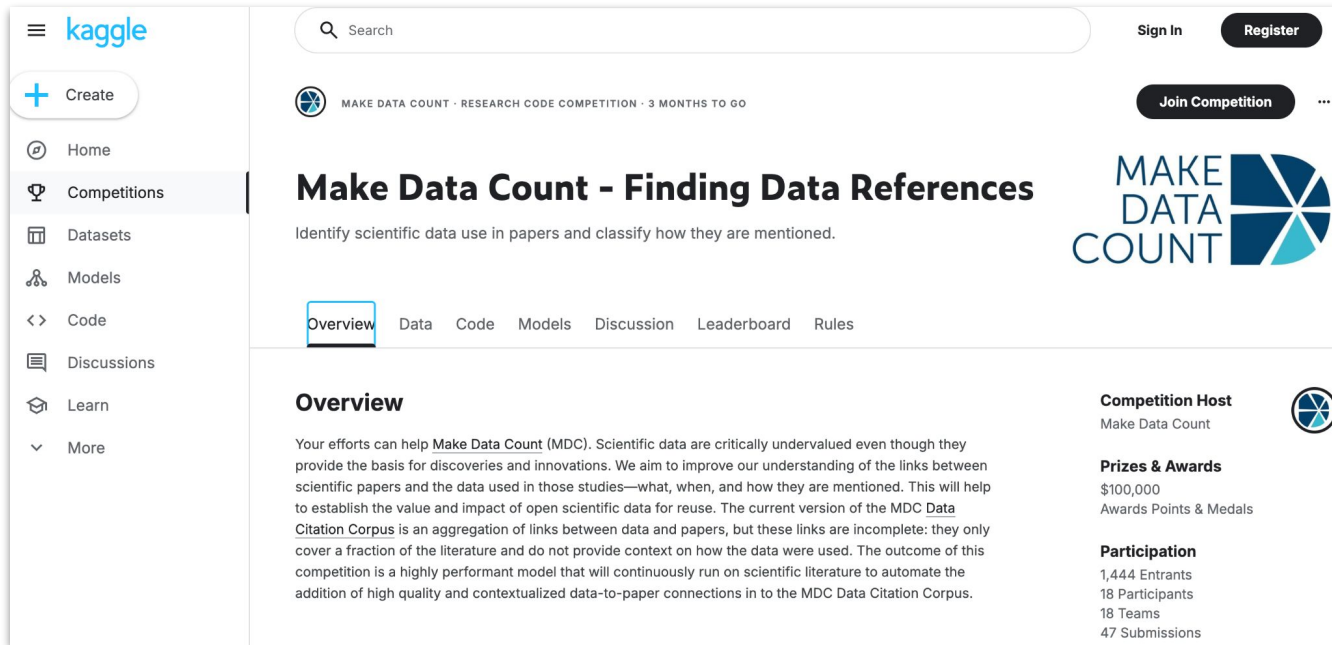
	All versions	This version
Views	7,202	670
Downloads	1,264	193
Data volume	1.3 TB	205.5 GB

Data Citation Corpus data file in Zenodo:
<https://doi.org/10.5281/zenodo.11196858>



Kaggle competition: Make Data Count – Finding Data References

Machine learning techniques to 1) identify mentions of data in the text of articles and 2) classify the mention as primary or secondary use of the data.



The screenshot shows the Kaggle interface for the 'Make Data Count - Finding Data References' competition. The left sidebar contains navigation options: Home, Competitions (selected), Datasets, Models, Code, Discussions, Learn, and More. The main content area features a search bar, a 'Sign In' button, and a 'Register' button. Below these is a 'Join Competition' button. The competition title is prominently displayed, followed by a description: 'Identify scientific data use in papers and classify how they are mentioned.' A navigation bar below the title includes 'Overview' (highlighted), 'Data', 'Code', 'Models', 'Discussion', 'Leaderboard', and 'Rules'. The 'Overview' section contains a paragraph explaining the competition's goal: to help Make Data Count (MDC) by identifying and classifying data mentions in scientific papers. On the right side, there are three summary cards: 'Competition Host' (Make Data Count), 'Prizes & Awards' (\$100,000), and 'Participation' (1,444 Entrants, 18 Participants, 18 Teams, 47 Submissions).

Competition Host: Make Data Count

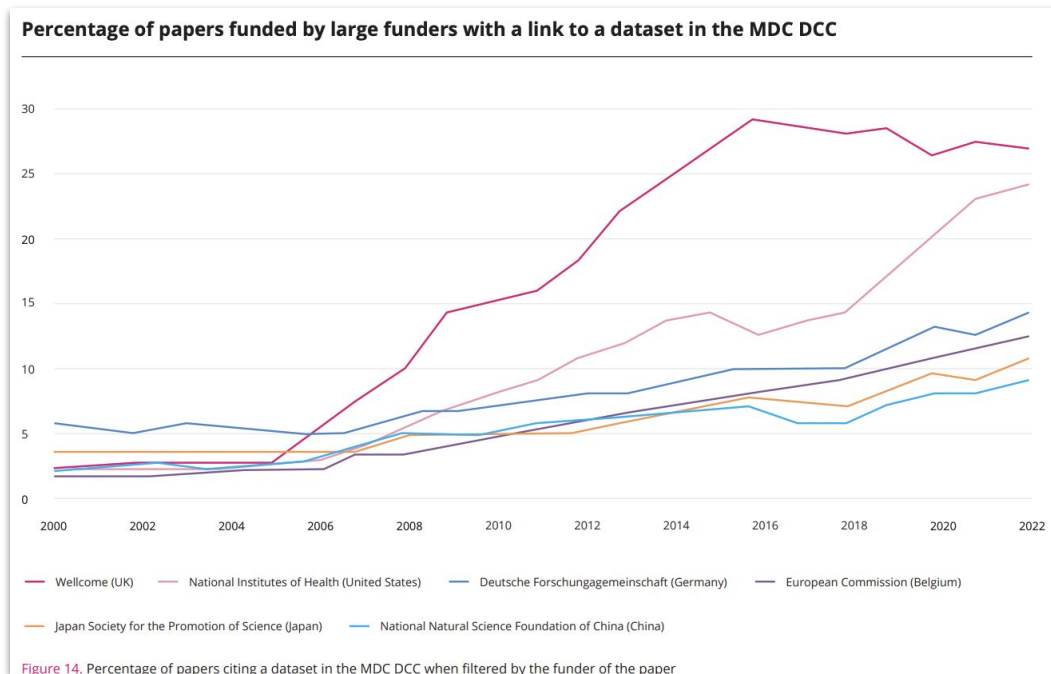
Prizes & Awards: \$100,000 Awards Points & Medals

Participation: 1,444 Entrants, 18 Participants, 18 Teams, 47 Submissions

www.kaggle.com/competitions/make-data-count-finding-data-references

Insights with the Data Citation Corpus

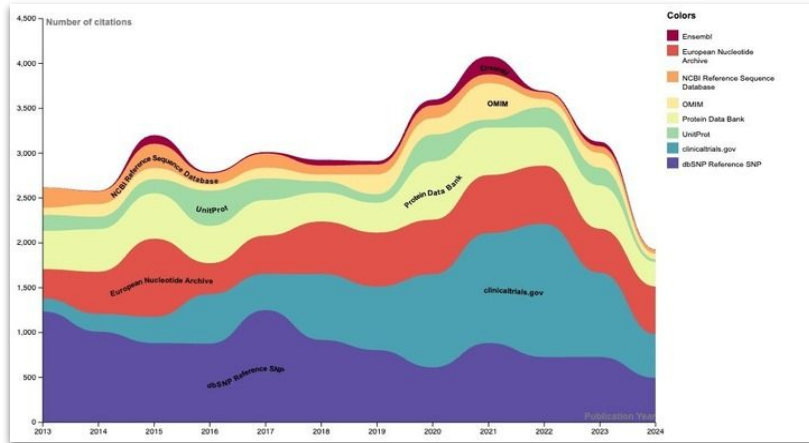
The Data Citation Corpus was one of the sources for the analyses in the State of Open Data report by Digital Science, Figshare and Springer Nature.



Hahnel, Mark; Smith, Graham; Campbell, Ann (2024). The State of Open Data 2024: Special Report Bridging policy and practice in data sharing. Digital Science. Report. <https://doi.org/10.6084/m9.figshare.27337476.v2>

Data Citation Corpus: insights for libraries

Analysis of data citations for Northwestern University & the University of Colorado, Boulder, using data citations in the Data Citation Corpus and in Europe PMC.

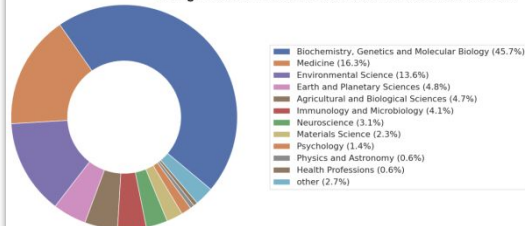


Most used repositories: dbSNP, Protein Data Bank, European Nucleotide Archive

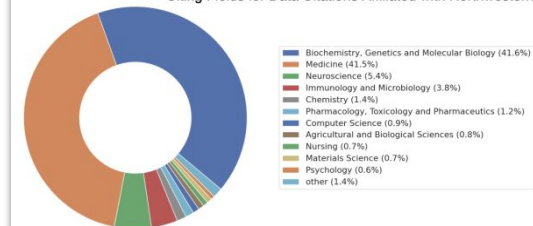
Data-intensive research areas at Northwestern University: cancer, immunology, infectious diseases, biochemistry, molecular biology, neuroscience.

Data-intensive research areas at University of Colorado, Boulder: environmental sciences (microbial ecology, polar research), molecular biology, genetics, plant sciences.

Citing Fields for Data Citations Affiliated with CU Boulder



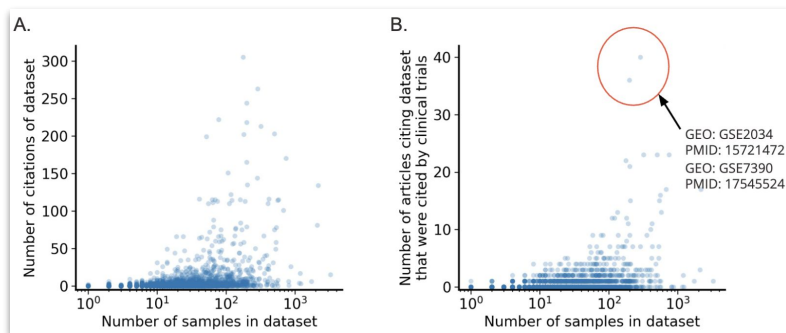
Citing Fields for Data Citations Affiliated with Northwestern



Wittenberg, J., Portenoy, J., Puebla, I., & Holmes, K. (2025). Automating data citation at scale to advance open data metrics. Association of College & Research Libraries (ACRL 2025), Minneapolis. Zenodo. <https://doi.org/10.5281/zenodo.15130354>

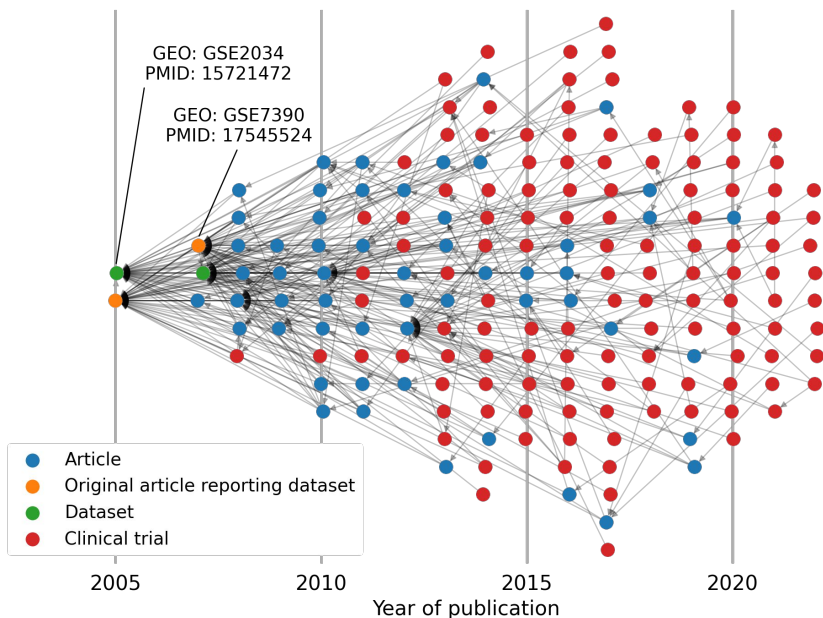
Insights into translational data impact

Collaboration with researchers at Northwestern University: Used the Data Citation Corpus as a basis to trace how datasets move from basic science into health applications.



Identified two GEO datasets for human data with a high number of citations and high number of samples.

Richardson, R., Puebla, I., Portenoy, J., Gutzman, K., & Holmes, K. (2025). Opening up translational data impact through the Data Citation Corpus. Zenodo. <https://doi.org/10.5281/zenodo.15299655>



Citation networks between the GEO datasets and the articles reporting the datasets, and the publications that subsequently cited those articles (through iCite). 55 non-clinical trial articles cite GSE2034 & GSE7390, these were later cited by 124 clinical trials.



Capturing the diversity of interactions with data

Photo by RM on Unsplash

FORCE11 Data usage typologies Working Group

The group responds to the interest in understanding the context for the use and reuse of data, and brings together representatives from the data ecosystem: researchers, institutional representatives, funding agencies, and infrastructure providers.

Goal: Develop a common typology of data uses so that the community can consistently compare and evaluate how data are used.

Deliverables:

- A codified list of data-usage types
- Characteristics to identify each usage type
- Metadata recommendations


<https://force11.org/group/data-usage-typologies/>

Data usage typologies


December 17, 2024

Groups: Active Groups, Data usage typologies

Group leaders



Iratxe Puebla



Evgeny Bobrov

Summary

In the evaluation of the use of shared data, a question that often arises is the context for the use of the data. The community wants to understand if the dataset is being used in the context of data-sharing as part of the original research (i.e. the authors mention a dataset they have created and shared) or whether the data is being used in new research endeavors (i.e. reused by other researchers, or by the same researchers for a new research project). There is also interest in a more nuanced understanding of the types of uses of data as part of research activities, for example, whether they are re-analysed on their own or as part of a larger collection of related datasets. Different groups are interested in gaining these nuanced insights into the use of data, for the purposes of meta-research or the impact of data outputs, but there is yet no community consensus as to how we conceptualize use and reuse of datasets. The Working Group will bring together representatives from the data ecosystem to generate a typology of data use types, along with recommendations on how to identify and utilize the usage types as part of metadata and data evaluation practices.

Goals

The Working Group will aim to develop a common typology of data uses, along with their description and associated characteristics, so that repositories, publishers, institutions, funders, infrastructure providers and meta-researchers can consistently capture, compare and evaluate the ways in which data is used.

Deliverables

- Codified list of data use types
- Common set of characteristics to identify each of the use types
- Recommendations for how to capture data use types in metadata

FORCE11 Data usage typologies Working Group

The group has identified three key dimensions of usage, each dimension has associated categories and values.



Access → Actor → Human or machine



User



Application

We will share the typology publicly in early 2026.

Incorporating data in research evaluation



Photo by Piret Ilver on Unsplash

'Implementing data evaluation in academia' Working Group

A collaboration between Make Data Count and HELIOS Open, the working group has developed resources to support the implementation of data evaluation in institutional processes.

Institutional Data Evaluation and Assessment (IDEA) Maturity Model: A self-assessment tool for institutions to evaluate their practices and their capacity to assess research data.

	Initial	Emerging	Established	Optimizing
Cultural Norms & Expectations	Data are treated as byproducts rather than as a scholarly asset and are largely invisible to institutional norms around news tracking and data data collection. Researchers are not expected to share data or respond to requests, and there are no norms or practices for reporting news or citation.	Conversations about the importance of data in evaluation are beginning. Institutional norms around news tracking and data collection are slowly, but not necessarily, being reformed. Researchers are being recruited to identify champions or champions of research data as a high-level objective, but expectations are largely compliance-driven and inconsistent.	There is growing recognition that data are a valuable scholarly contribution, and that the institution's ability to achieve its goals and demonstrate its value is linked to the research community. Expectations for research data are being established through, including evidence of impact, are consistent across the institution, and specific practices are discipline-sensitive and developed with researchers. Data evaluation metrics are systematically applied to various settings, investments and recognition, reinforcing data as a core of both scholarly identity and institutional success.	There is a shared understanding that data are a valuable scholarly contribution, and that the institution's ability to achieve its goals and demonstrate its value is linked to the research community. Expectations for research data are being established through, including evidence of impact, are consistent across the institution, and specific practices are discipline-sensitive and developed with researchers. Data evaluation metrics are systematically applied to various settings, investments and recognition, reinforcing data as a core of both scholarly identity and institutional success.
Policies & Processes	Institutional and department-level policies do not reference data sharing or reuse as scholarly contributions. There are no policies, norms, guidelines, or workflows in place for reporting data evaluation. As a result, data activities are not reported or considered in funding, promotion, or performance evaluations, and no internal processes support their assessment.	Institutional policies acknowledge data contributions, but many it relates to compliance, contracts, or management responsibilities rather than as scholarly activities. Processes for including data activities in review materials exist but are not consistently followed. Some internal categories like public engagement or general research output. Recognition remains inconsistent and is largely dependent on the discretion of individual reviewers or departments, individual reviewers or departments.	Institutional policies explicitly identify data sharing, reuse, and impact as scholarly contributions that advance both research and teaching. Processes to document and evaluate data activities are being established. Internal policies that relate to other categories like public engagement or general research output. Recognition remains inconsistent and is largely dependent on the discretion of individual reviewers or departments, individual reviewers or departments.	Institutional policies explicitly identify data sharing, reuse, and impact as scholarly contributions that advance both research and teaching. Processes to document and evaluate data activities are being established. Internal policies that relate to other categories like public engagement or general research output. Recognition remains inconsistent and is largely dependent on the discretion of individual reviewers or departments, individual reviewers or departments.
Incentives & Rewards	Data contributions are not recognized as research identity metrics and are generally excluded from performance or promotion evaluations. Institutional incentives—monetary, reputational, or otherwise—are not designed to encourage data sharing and impact reporting. When recognition of data contributions occurs, it is informal and not connected to institutional goals or priorities.	Data contributions receive occasional recognition, often driven by individual advocacy or specific leader recognition. In small amounts, but these efforts are modest and fragmented. Recognition and rewards for data sharing are inconsistent, and provide little motivation for researchers to prioritize these activities.	The institution and many departments formally recognize data sharing, reuse, and impact as scholarly contributions, incorporating their inclusion in CVs, promotion materials, and internal reports, grant proposals, and internal grants, seed funding, or awards for data-related work. Some targeted institutional support for these activities. However, implementation and practices of these incentives remain uneven, and recognition of data activities is not yet consistently applied.	Data contributions and their impact are fully recognized as scholarly outputs and are consistently integrated into researcher evaluation frameworks alongside traditional metrics. Academic incentives, including monetary—through funding, recognition programs, and advancement opportunities—rewards and institutional data sharing, and is fully recognized to ensure alignment with institutional goals. Recognition and rewards are applied transparently and consistently across the institution, and data contributions are regularly highlighted as institutional priorities and benchmarks in institutional reports and communications.
Infrastructure	There are no coordinated training or outreach efforts focused on evaluating or reporting data-sharing activities. Workforce development efforts are absent. Workforce expertise exists in some departments, it is not deployed to meet institutional data evaluation needs and researchers lack access to consultation or guidance to support these activities.	Limited evaluation-focused support and training exist in a few units, but awareness and reach are low. Workforce development is informal and ad hoc, without institution-wide coordination or integration into institutional processes. A small number of experts provide consultation upon request, yet guidance is not available or reporting data-sharing activities is inconsistent and services are not provided in a way that makes them easy to find or use.	Training and outreach opportunities related to evaluating data-sharing activities are broadly available and increasing in scope. Institutional training and support is provided across various units and departments. Workforce development is coordinated through programs in institutional units such as those for research support, with growing alignment to institutional priorities. Experts provide defined consultation and support for evaluation, and consistent coordination is strengthening, even if coverage is not yet comprehensive.	Training on evaluating and reporting data-sharing activities is consistently available, and tailored to diverse roles and needs. Institutional training and support is provided across various units and departments. Workforce development is coordinated through programs in institutional units such as those for research support, with growing alignment to institutional priorities. Experts provide defined consultation and support for evaluation, and consistent coordination is strengthening, even if coverage is not yet comprehensive.
Capacity Building	There are no coordinated training or outreach efforts focused on evaluating or reporting data-sharing activities. Workforce development efforts are absent. Workforce expertise exists in some departments, it is not deployed to meet institutional data evaluation needs and researchers lack access to consultation or guidance to support these activities.	Limited evaluation-focused support and training exist in a few units, but awareness and reach are low. Workforce development is informal and ad hoc, without institution-wide coordination or integration into institutional processes. A small number of experts provide consultation upon request, yet guidance is not available or reporting data-sharing activities is inconsistent and services are not provided in a way that makes them easy to find or use.	Training and outreach opportunities related to evaluating data-sharing activities are broadly available and increasing in scope. Institutional training and support is provided across various units and departments. Workforce development is coordinated through programs in institutional units such as those for research support, with growing alignment to institutional priorities. Experts provide defined consultation and support for evaluation, and consistent coordination is strengthening, even if coverage is not yet comprehensive.	Training on evaluating and reporting data-sharing activities is consistently available, and tailored to diverse roles and needs. Institutional training and support is provided across various units and departments. Workforce development is coordinated through programs in institutional units such as those for research support, with growing alignment to institutional priorities. Experts provide defined consultation and support for evaluation, and consistent coordination is strengthening, even if coverage is not yet comprehensive.
External Alignment & Engagement	There is little or no institutional assessment of external research assessment efforts, such as DOEA, CARA, HELIOS Open, or other initiatives aimed at broadening the reach of scholarly contributions. Processes for evaluating diverse research outputs are absent from institutional policies and review practices, and there is no recognition of how such systems could advance the institution's goals or priorities. The institution does not engage with or contribute to external reform conversations.	Assessments of external research assessment reform efforts, such as DOEA, CARA, HELIOS Open, or other initiatives aimed at broadening the reach of scholarly contributions. Processes for evaluating diverse research outputs are absent from institutional policies and review practices. Engagement with external reform conversations is limited and typically driven by individual champions or disciplines, without clear coordination to institutional goals or priorities or disciplines, without clear coordination to institutional goals or priorities.	The institution increasingly incorporates principles from external research assessment reform efforts into its policies and practices. Consistent engagement and participation in external reform conversations, including through the reporting diverse scholarly contributions and evaluation metrics are reflected into appearing across multiple units. These conversations are visible not only at the institutional level but also in reporting the institution's own goals for transparency, integrity, and research excellence. Engagement with external reform conversations is more coordinated, though visible and explicit data remain uneven across departments and disciplines.	The institution demonstrates a sustained commitment to research assessment reform efforts by participating in and contributing to external reform efforts such as DOEA, CARA, HELIOS Open and related initiatives. Principles for recognizing diverse scholarly contributions and evaluation metrics are fully reflected into appearing across multiple units. These conversations are visible not only at the institutional level but also in reporting the institution's own goals for transparency, integrity, and research excellence. Engagement with external reform conversations is more coordinated, though visible and explicit data remain uneven across departments and disciplines.

<https://makedatacount.org/explore-resources/institutions/>

Advancing institutional data evaluation

Implementation guide for institutions

- Sample text for institutional policies
- CV template for researchers
- Guidance for evaluation committees

01

Tenure & Promotion Policies

Sample Language

This section contains sample text that may be included in policy documents to signal recognition of data contributions and open scholarship practices. Institutions are encouraged to adapt and extend the examples as appropriate to their needs. The article [‘Ten simple rules for recognizing data and software contributions in hiring, promotion, and tenure’](#) provides further guidance and considerations for recognizing data and software in institutional processes.

Research productivity and open scholarship

Our institution recognizes research practices designed to make research more reliable, rigorous, and aligned to open scholarship. The evaluation process is transparent and values the broad spectrum of research products that researchers produce and openly share as part of their research. When describing their research productivity, faculty are encouraged to document and share open datasets, software, workflows, protocols, code, and other scholarly products that contribute to research transparency, accessibility, and impact, alongside traditional research outputs such as journal publications.

Assessments of research productivity at our institution incorporate attributes related to open data and open research outputs, such as those below.

- Creation or curation of datasets that are shared openly to the extent that this is ethically and legally possible.
- Creation and open sharing of research or analysis tools, workflows, software or code.
- Creation of resources for facilitating research, such as data collections, or platforms for hosting and/or interfacing with large datasets to facilitate collaborative research. This also includes platforms to interact with closed data that cannot be shared in their raw form due to privacy or ethical concerns.

Open scholarship practices

Faculty who adopt open scholarship practices – including data management and sharing, open access publications and preprints, open methods and workflows (e.g., preregistration), open educational materials, and open code – are recognized for their contributions to scientific rigor and reproducibility.

Assessment of research contributions

The evaluation of research contributions includes consideration toward evidence of adherence to community standards for open and reproducible scholarship; complete reporting of activities across the research cycle (e.g., via preregistration and adherence to reporting guidelines); and the development (and open sharing, where ethically and legally permitted) of research tools, instruments, code, and data.

Evaluators consider the time, complexity, and collaborative nature of producing high-quality reusable datasets and data infrastructures. This includes curating, maintaining, and sharing datasets ethically and sustainably. Evaluators may also want to recognize contributions that enhance accessibility in research, particularly work that addresses the specific needs of underrepresented communities.

Research that involves the use of existing datasets or collections of datasets is also considered, and researchers are encouraged to discuss these approaches and how they relate to practices in their field in their personal statements for consideration by the evaluators.

Evaluation of potential for impact

The evaluation of the potential for impact of the research contributions can be informed by a wide range of indicators that span beyond traditional publication metrics. Indicators of potential for impact may include quantitative measures, contextual information, and qualitative evidence. Such indicators may include:

- Complete reporting of results and open sharing of research outputs associated with published articles, through preregistrations, open data, code and/or materials
- Counts of open datasets and other open outputs
- Citations to data, software or preregistrations
- Dataset views and downloads
- Software downloads and installs
- Use of the data, software or open outputs in projects, activities, or collaborations that advanced understanding in the field or addressed knowledge gaps
- Evidence of adherence to community standards for open scholarship (e.g. FAIR principles) and standards for conducting ethically sound and reproducible research
- Evidence of community engagement or endorsement of the open data or other open outputs reviewed

The outline of the potential for impact for the research contributions can take a narrative format, where the researcher provides a contextualized description of their key data and open outputs and how they advanced the generation of new ideas, data, methodologies or knowledge. This outline can include a description of the pathways to impact that the researcher envisions for their data and open outputs, including possible future issues that might advance research endeavours, spur innovation, or bring societal benefit.

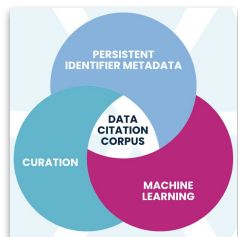
Advancing institutional data evaluation

Data evaluation case stories

- Institutions taking steps to incorporate data into their research evaluation processes
- Researchers reporting data as part of their academic contributions



Engage with Make Data Count



Explore the **Data Citation Corpus** and share your feedback.

Do you collect data citations? Get in touch about contributing those to the Corpus.



Get in touch to learn more about the **implementation of standardized data-usage tracking** at your repository.



Share your case studies and perspectives about data evaluation, we'll be happy to share your story.

Thank you!



**MAKE
DATA COUNT.**

info@makedatacount.org

makedatacount.org

Zenodo community: zenodo.org/communities/makedatacount